

**X(4230)** $I^G(J^{PC}) = ?^?(1^{--})$ 

## OMITTED FROM SUMMARY TABLE

Enhancement reported by ABLIKIM 15C in  $e^+ e^- \rightarrow \omega \chi_{c0}$  at  $\sqrt{s} = 4.23\text{--}4.26$  GeV at  $9\sigma$  significance. Lineshape found to be inconsistent with origination from  $X(4260)$ . NEEDS CONFIRMATION.

NODE=M222

**X(4230) MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>4230±8±6</b>	180	<sup>1</sup> ABLIKIM	15C BES3	$e^+ e^- \rightarrow \omega \chi_{c0}$

<sup>1</sup> From a 3-parameter fit of measured cross sections from  $\sqrt{s} = 4.21\text{--}4.42$  GeV to a phase-space modified Breit-Wigner function, using the decays  $\chi_{c0} \rightarrow \pi^+ \pi^-$ ,  $\chi_{c0} \rightarrow K^+ K^-$ , and  $\omega \rightarrow \pi^+ \pi^- \pi^0$ .

NODE=M222

NODE=M222M

NODE=M222M

NODE=M222M;LINKAGE=A

**X(4230) WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>38±12±2</b>	180	<sup>1</sup> ABLIKIM	15C BES3	$e^+ e^- \rightarrow \omega \chi_{c0}$

<sup>1</sup> From a 3-parameter fit of measured cross sections from  $\sqrt{s} = 4.21\text{--}4.42$  GeV to a phase-space modified Breit-Wigner function, using the decays  $\chi_{c0} \rightarrow \pi^+ \pi^-$ ,  $\chi_{c0} \rightarrow K^+ K^-$ , and  $\omega \rightarrow \pi^+ \pi^- \pi^0$ .

NODE=M222W

NODE=M222W

NODE=M222W;LINKAGE=A

**X(4230) DECAY MODES**

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $e^+ e^-$	
$\Gamma_2$ $\omega \chi_{c0}$	seen

**X(4230)  $\Gamma(i)\Gamma(e^+ e^-)/\Gamma(\text{total})$** 

$\Gamma(\omega \chi_{c0}) \times \Gamma(e^+ e^-)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	$\Gamma_2\Gamma_1/\Gamma$
<b>2.7±0.5±0.4</b>	<sup>1</sup> ABLIKIM	15C BES3	$e^+ e^- \rightarrow \omega \chi_{c0}$

<sup>1</sup> From a 3-parameter fit of measured cross sections from  $\sqrt{s} = 4.21\text{--}4.42$  GeV to a phase-space modified Breit-Wigner function, using the decays  $\chi_{c0} \rightarrow \pi^+ \pi^-$ ,  $\chi_{c0} \rightarrow K^+ K^-$ , and  $\omega \rightarrow \pi^+ \pi^- \pi^0$ .

NODE=M222215;NODE=M222

DESIG=1

DESIG=2

NODE=M222220

NODE=M222G01  
NODE=M222G01

NODE=M222G01;LINKAGE=A

**X(4230) BRANCHING RATIOS**

$\Gamma(\omega \chi_{c0})/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	$\Gamma_2/\Gamma$
<b>seen</b>	<sup>1</sup> ABLIKIM	15C BES3	$e^+ e^- \rightarrow \omega \chi_{c0}$

<sup>1</sup> From a 3-parameter fit of measured cross sections from  $\sqrt{s} = 4.21\text{--}4.42$  GeV to a phase-space modified Breit-Wigner function, using the decays  $\chi_{c0} \rightarrow \pi^+ \pi^-$ ,  $\chi_{c0} \rightarrow K^+ K^-$ , and  $\omega \rightarrow \pi^+ \pi^- \pi^0$ .

NODE=M222225

NODE=M222R01  
NODE=M222R01

NODE=M222R01;LINKAGE=A

**X(4230) REFERENCES**

ABLIKIM

15C PRL 114 092003

M. Ablikim *et al.*

(BES III Collab.)

NODE=M222

REFID=56401